

## REMR MATERIAL DATA SHEET CM-SE-1.54 CONCRETE SEALER: URETHABOND 104

1. NAME

UrethaBond 104

2. MANUFACTURER

Coating for Industry, Inc. 310 Township Line Road Souderton, PA 18964 Telephone: 215-723-0919

3. DESCRIPTION

One package aromatic urethane, moisture-curing, primer/finish.

4. USES

Urethabond 104 is a maintenance primer and finish coating for interior and exterior use over steel and masonry surfaces where a high degree of chemical, abrasion and corrosion resistance is required. This coating is generally used as a primer on steel and galvanized surfaces where only marginal surface preparation can be achieved. It has been used as a primer for Urethabond urethane, Wearcoat epoxy and Altex silicone-alkyd topcoat systems.

Urethabond 104 can be used as a topcoat where gloss retention is not a critical factor, i.e., as an aluminum roof paint. Because it has excellent salt corrosion resistance properties, Urethabond 104 has been widely used in marine atmospheres. It has also been used on steel tanks, stacks, piping, metal building paneling, trucks, railcars, bridges, etc. Urethabond 104 is a one-package product to be applied as supplied. It must not be thinned.

5. MANUFACTURER'S TECHNICAL DATA

Volume solids:

50%

Number of coats:

2, min

Film thickness, min

2 mils dry
(4 mils wet)

per coat

max

3.5 mils dry (7 mils wet) per coat

Theoretical coverage

400 sq ft/gal

@ 2 mils DFT:

Drying time @ 75 °F,

50% rh

-0.7 hr Tack free -1.25 hr Hard dry -3.00 hr Mar free -4.5 hr

To touch

Recoat time:

3 hr min 48 hr max

Maximum hardness:

7 days

Thinner:

Not to be thinned

Cleanup solvent:

CFI-704 cleaner, lacquer thinner,

aromatics 100

Minimum application 25 °F temperature

Maximum service 300 °F dry, temperature continuous

Fire resistance of dry Selffilm extinguishing

## 6. MANUFACTURER'S GUIDANCE FOR APPLICATION

Surface preparation: Surface should be free of all dust, form oils, curing compounds and other foreign matter. If the surface is smooth, it should be sandblasted or etched with a 15 or 20% solution of muriatic acid for maximum adhesion. The acid-etching material must be completely removed and the surface thoroughly dry before application of Urethabond coatings.

Application: Urethabond 104 may be applied by brush, roller (short nap) or spray (air atomizing or airless). These coatings are moisture curing, and it is extremely important that the surface be free of all moisture prior to coating application. Also, the coating should dry for a minimum of one hour at 75 °F and 50% rh prior to being subjected to moisture (rain); longer at lower temperatures and relative humidity.

Stir prior to use to assure that no settled pigment remains at bottom of container. Use only low speed mixing and avoid developing a vortex as this will introduce moisture into the system which can cause gelling. Keep lid on container when not in use and store only in dry areas.

Cautions: Urethabond 104 contains aromatic polyisocyanate prepolymer. Use adequate ventilation. In confined areas, use adequate forced ventilation during application and drying. When spraying, use a fresh air mask such as #W-292 manufactured by 3M Co. Urethabond is harmful or fatal if swallowed.

If swallowed do not induce vomiting. Call physician immediately.

Eye irritant: Wear eye protection. In case of contact with eyes, flush repeatedly with water and contact a physician.

Difficult to remove from skin: Wear gloves and protective clothing. Moisture in skin will cause rapid cure. Do not attempt to remove cured coating on skin with solvent; soak in warm, soapy water. Barrier creams are not recommended where possible to cover with protective clothing.

<u>Combustible:</u> Keep away from heat, sparks and open flame. Refer also to manufacturer's material safety data sheet.

7. CORPS OF ENGINEERS' EVALUATION (tested as concrete sealers only)

Physical and mechanical properties:

Percent solid (ASTM D 1644, Method A): 62.4%

Percent moisture absorption (ambient temp) (ASTM C 642-82):

1 day 0.06% 2 days 0.08% 4 days 0.10% 7 days 0.14%

Ratio of percent moisture absorption for treated to nontreated specimen (2-day submersion): 1.70%

Percent vapor transmittance (see Technical Note CS-ES-1.8):

2 days 0.03% 4 days 0.09% 7 days 0.15%

Ratio of percent vapor transmittance for treated to nontreated specimen (2-day diffusion): 1.88%

## 8. ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of activities involving potentially hazardous and toxic chemical substances. Manufacturer's recommendations to protect occupational health and environmental quality should be carefully followed. Material safety data sheets must be obtained from the manufacturers of such materials. cases where the effects of a chemical substance on occupational health or environmental quality are unknown, chemical substances should be treated as potentially hazardous toxic materials.